Material Safety Data Sheet
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OSHA's Hazard Communication Standard,
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U.S. Department of Labor
Occupational Safety and Health Administration (Non-Mandatory Form) Form Approved OMB No. 1218-0072



Potassium Sulfate		Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.			
Section I					
Manufacturer's Name		Emergency Tele	nhone Number	1 10 10 10 10 10 10 10 10 10 10 10 10 10	
GSL Minerals & Chemicals	s Corp.	Emergency Telephone Number (801) 731-3100			
Address (Number, Street, City, State, and	d ZIP Code)	Telephone Number for Information			
765 North 10500 West		(801) 731-3100			
Ogden, Utah 84404		Date Prepared July 16, 1990			
		Signature of Pre			
Section II — Hazardous Ingred	lients/Identity Information	n			
Hazardous Components (Specific Chemi	ical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional
None				, iocommended	45 TOPHONAL
	THE OF OIL CAS & MILE				
Section III — Physical/Chemica	W. OF DIE				
Section III — Physical/Chemica Boiling Point	I Characteristics	Specific Gravity (F	H <sub>2</sub> O = 1)		
	I Characteristics	Specific Gravity (F	H <sub>2</sub> O = 1)		2.7
Boiling Point  Vapor Pressure (mm Hg.)	I Characteristics	Melting Point	H <sub>2</sub> O = 1)		2.7 I067 degrees C
Boiling Point  Vapor Pressure (mm Hg.)	I Characteristics N/A N/A	Melting Point  Evaporation Rate			degrees C
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water	I Characteristics	Melting Point			106/
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  1 gm per 8.3 m1	I Characteristics N/A N/A	Melting Point  Evaporation Rate			degrees C
Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  1 gm per 8.3 ml  Appearance and Odor	N/A N/A N/A	Melting Point  Evaporation Rate			degrees C
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  1 gm per 8.3 ml  Appearance and Odor  Solid whitish color - no	N/A N/A N/A COlor	Melting Point  Evaporation Rate			degrees C
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water  1 gm per 8.3 ml  Appearance and Odor  Solid whitish color - no  Section IV — Fire and Explosio	N/A N/A N/A COlor	Melting Point  Evaporation Rate (Butyl Acetate = 1			degrees C
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water 1 gm per 8.3 ml  Appearance and Odor  Solid whitish color - no  Section IV — Fire and Explosio  Flash Point (Method Used)	N/A N/A N/A COlor	Melting Point  Evaporation Rate		LEL N/A	106/ degrees C N/A
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water 1 gm per 8.3 ml  Appearance and Odor  Solid whitish color - no  Section IV — Fire and Explosio  Flash Point (Method Used)  V/A  Extinguishing Media	N/A N/A N/A COlor	Melting Point  Evaporation Rate (Butyl Acetate = 1)		LEL N/A	degrees C
Boiling Point  Vapor Pressure (mm Hg.)	N/A N/A N/A COlor	Melting Point  Evaporation Rate (Butyl Acetate = 1)		LEL N/A	106/ degrees C N/A
Boiling Point  Vapor Pressure (mm Hg.)  Vapor Density (AIR = 1)  Solubility in Water 1 gm per 8.3 ml  Appearance and Odor  Solid whitish color - no  Section IV — Fire and Explosio  Flash Point (Method Used)  V/A  Extinguishing Media  Not flammable	N/A N/A N/A COlor	Melting Point  Evaporation Rate (Butyl Acetate = 1)		LEL N/A	106/ degrees C N/A

Stability	Unstable	Conditions to Avoid		
	N/A Stable	None		
Incompatibility	(Materials to August			
Vone	(Materials to Avoid)			
None under	mposition or Byproduce normal cond	itions, SO <sub>2</sub> at ext	remely high temperatur	es
Hazardous Polymerization	May Occur N/A	Conditions to Avoid		
	Will Not Occur			
Section VI -	- Health Hazard	Data		
Route(s) of Entry	r: Inhal	ation? See below	Skin? See below	Ingestion? See below
Health Hazards	(Acute and Chronic)	See below	See Delow	See below
None				
Carcinogenicity:	NTP1	2	IARC Monographs?	OSHA Regulated? N / A
	N/A	N/A	N/A	OSHA Regulated? N/A
mergency and I	First Aid Procedures			At a second of the second of t
Section VII —	First Aid Procedures water  - Precautions for an in Case Material Is luble in water	r Safe Handling and Us Released or Spilled	ie .	
Section VII — Steps to Be Take Readily so	- Precautions fo en in Case Material Is Tuble in wate	Released or Spilled	ie .	
Section VII — Steps to Be Take Readily SO	- Precautions for in Case Material is luble in water	Released or Spilled	asic solution occurs	
Section VII — Steps to Be Take Readily So Waste Disposal M	Precautions for in Case Material is luble in water	Released or Spilled		
Section VII — Steps to Be Take Readily so Waste Disposal M Soluble in	- Precautions for in Case Material is luble in water	Released or Spilled		
Section VII — Steps to Be Take Readily so  Waste Disposal No Oluble in	Precautions for an in Case Material is luble in water water - neut	Released or Spilled		
Section VII — Steps to Be Take Readily SO  Waste Disposal No Oluble in  Precautions to Be No Special	Precautions for an in Case Material is luble in water	Released or Spilled er  tral or slightly b	asic solution occurs	
Section VII — Steps to Be Take Readily SO  Waste Disposal No Oluble in  Precautions to Be No Special	Precautions for an in Case Material is luble in water	Released or Spilled	asic solution occurs	
Section VII — Steps to Be Take Readily so  Waste Disposal Moluble in  Precautions to Be NO SPECIAL  Other Precautions Iormal stal	Precautions for a print Case Material is luble in water water - neutral material is storage required a storage required and and practice — Control Measu	Released or Spilled  tral or slightly be  nd Storing il rements  ces for good hygie	asic solution occurs	
Section VII — Steps to Be Take Readily so  Waste Disposal Moluble in  Precautions to Be NO SPECIAL  Other Precautions Normal stal  Section VIII — Respiratory Protes	Precautions for an in Case Material is luble in water water - neutral material is a storage requirement of the control Measuretton (Specify Type)	Released or Spilled  tral or slightly be  ind Storing il rements  ces for good hygie	asic solution occurs	
Section VII — Steps to Be Take Readily so  Waste Disposal Moluble in  Precautions to Be No Special  Other Precautions Normal stail	Precautions for a precaution of the prince of the prince of the prince of the precaution of the precau	Released or Spilled  tral or slightly be  ind Storing il rements  ces for good hygien  ires  isty conditions	asic solution occurs	
Section VII — Steps to Be Take Readily so  Waste Disposal Moluble in  Precautions to Be No Special Other Precautions Normal stal  Section VIII — Respiratory Protect Simple dust Ventilation	Precautions for the property of the property o	Released or Spilled  tral or slightly be  ind Storing il rements  ces for good hygies  ires  isty conditions  for dust	asic solution occurs  ne	
Section VII — Steps to Be Take Readily so  Waste Disposal Moluble in  Precautions to Be No Special  Other Precautions Iormal stal  Section VIII — Respiratory Protect Simple dustiventilation	Precautions for an in Case Material is Tuble in water and water - neutral storage required to mask for du Local Exhaust As required Mechanical (General) As required	Released or Spilled  tral or slightly be  ind Storing il rements  ces for good hygies  ires  isty conditions  for dust	asic solution occurs  ne	
Section VII — Steps to Be Take Readily SO  Waste Disposal Modern Precautions to Be No Special  Other Precautions Normal stal  Section VIII — Respiratory Protection Ventilation  Protective Gloves	Precautions for an in Case Material is luble in water water - neut wat	Released or Spilled  tral or slightly be  ind Storing Threments  ces for good hygien  ires  isty conditions  for dust  for dust	asic solution occurs  ne	conditions /
Section VII — Steps to Be Take Readily SO  Waste Disposal Modern Precautions to Be No Special  Other Precautions Normal stal  Section VIII — Respiratory Protection Ventilation  Protective Gloves	Precautions for an in Case Material is luble in water and water an	Released or Spilled  tral or slightly be  ind Storing Threments  ces for good hygien  ires  isty conditions  for dust  for dust	asic solution occurs  ne	v conditions

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Magnesium Cloride Soluti	Note: Blank spaces are not permitted, if any item is not applicable, or no information is available, the space must be marked to indicate that.				
Section I					The state of
Manufacturer's Name GSL Minerals Corporati	on	Emergency Tele (801) 731			
Address (Number, Street, City, State, and	ZIP Code)	Telephone Number for Information			
765 North 10500 West		(801) 731-3100			
Ogden, Utah 84404		Date Prepared April 1	. 1994		
		Signature of Pre			
Section II — Hazardous Ingredi	ents/Identity Information	1			
Hazardous Components (Specific Chemic	al Identity: Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	o/o (optional)
None				0.00	
	OF OIL GAS & MIN				
Section III — Physical/Chemical Boiling Point	Characteristics				
Soming Form	225 degre	Specific Gravity (	$H_2O = 1$		1 00
Vapor Pressure (mm Hg.)	ZZS degre	Melting Point			1.32
Venez Bessit: (AIR 4)	N/A				N/A
Vapor Density (AIR = 1)	N/A	Evaporation Rate (Butyl Acetate =			
Solubility in Water 100%	IN/A	(Butyl Acetate =	<u>)                                    </u>		11
Appearance and Odor					
Liquid - slight yellow to Section IV — Fire and Explosion					
Flash Point (Method Used)	nazaru Data	Flammakia i		1:-	
ot flammable		Flammable Limits N/A		N/A	N/A
Extinguishing Media		N/ N		I N/A	I N/A
Special Fire Fighting Procedures					
				2 - 55 2	
Unusual Fire and Explosion Hazards None					

Section V -	- Reactivity Data					
Stability	Unstable N/A	Conditions to Avoid None		19 28 48 48		
	Stable	Home				
Incompatibility None	(Materials to Avoid)					
	emposition or Byproduc	S				1.1
None Hazardous	May Occur	Conditions to Avoid				
Polymerization	N/A Will Not Occur	None				
	X					
	- Health Hazard [	)ata				
Route(s) of Entr	y: Inhala	see below	Skin?	See below	Ingestion? See below	
Health Hazards None	(Acute and Chronic)			200 201011	occ below	
Carcinogenicity:	NTP?		IAPC Mo	nographs?	OSHA Paguiatad?	
	N/A	N/A	IANC MIC	N/A	OSHA Regulated?	
Signs and Symp	otoms of Exposure	dagaa	07 :			
Oral inge	scion of large	doses would caus	e GI irr	itation		
Medical Condition				An.		
Generally Aggra	vated by Exposure	one		14/10		
Emergency and	First Aid Procedures				4	
Flush with	First Aid Procedures  Nater					
		Safe Handling and Use	е			
Steps to Be Tak Flush with	en in Case Material is in Water	Released or Spilled				
Waste Disposal	Method					
Soluble in	<u>water-neutra</u>	l or slightly bas	ic solut	ion occurs		
Precautions to B	o Takon in Handling	10-				
No special	e Taken in Handling ar requirements	a Storing				
Other Precaution Normal Sta	ndard practic	e for good hygiene	2			
		o . o. good nygreno				
Section VIII	- Control Measur	PS				
	ection (Specify Type)					
Ventilation	Local Exhaust			Special N/A		
	Mechanical (General)			Other N/A		
Protective Gloves			Eye P	N/A rotection asses with sp	lach chicld-	
	Clothing or Equipment		61	asses with Sp	iash shields	
Work/Hygienic Pr						
N/A						

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OSHA 174, Sept. 1985

Sodium Chloride - Water S	Softener Solar Sal	Note: Blank spa	aces are not permitted on is available, the spa	t. If any item is not a ace must be marked	applicable, or no
Section I				The second second	
Manufacturer's Name GSL Minerals & Chemicals	Corp.	Emergency Tele (801) 731	ephone Number 1-3100		
Address (Number, Street, City, State, and Z 765 North 10500 West	Telephone Number for Information (801) 731-3100				
Ogden, Utah 84404		Date Prepared July 16,			
		Signature of Pre	eparer (optional)		
Section II — Hazardous Ingredier	nts/Identity Information	1			
Hazardous Components (Specific Chemical	Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	% (options
None					
	and the same of the				
				4 1 2 5	
		188 19			
Section III — Physical/Chemical C	Characteristics				
Boiling Point		Specific Gravity (	H <sub>2</sub> O = 1)		
Vapor Processo (mm. Lin	2050		20		2.2
Vapor Pressure (mm Hg.)	N/A	Melting Point			
Vapor Density (AIR = 1)		Evaporation Rate			N/A
Solubility in Water	N/A	(Butyl Acetate = 1	1)		N/A
(25 degrees C) 1 g per 2.8	ml				
Appearance and Odor					
White color - no odor					
Section IV — Fire and Explosion I	Hazard Data				
V/A		Flammable Limits N/A		LEL N/A	UEL N/A
Extinguishing Media		11/14		N/A	N/A
Not flammable Special Fire Fighting Procedures					
None					
Unusual Fire and Explosion Hazards					
Reproduce locally)					

Section V -	- Reactivity Data	- DIM		
Stability	Unstable N/A	Conditions to Avoid None		The same of the same of the same
	Stable	None		
Incompatibility	(Materials to Avoid)			
None				
Chlorine Chlorine	omposition or Byprodu	ucts		
Hazardous Polymerization	May Occur	Conditions to Avoid		
Olymenzation	Will Not Occur	None		
0	X			
Route(s) of Entr	- Health Hazard		0:-0	
		See below	See below	See below
None Hazards	(Acute and Chronic)			
				Control of the second second
Carcinogenicity:	NTP	?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	N/A	N/A
A particular to the second				
N/A and Symp	otoms of Exposure			
Medical Condition		N		
Generally Aggra	vated by Exposure	None		
Flush with	First Aid Procedures Water			
		1877 182		
Section VII -	- Precautions for	or Safe Handling and Us	Δ	
			C	
Readily so	en in Case Material Is Tuble in wat	er		
Waste Disposal I	Method	mal am alimbel. La	sic solution occurs	
orutile III	water - neut	rai or slightly bas	sic solution occurs	
Precautions to B	o Takon in Handling	C		
Vone	e Taken in Handling :	and Storing		
Other Precaution	s			
iorillar Sta	ndard practio	ce for good hygiene		
	- Control Measu	ıres		
Respiratory Prote	t mask for di	usy conditions		
Ventilation	Loca Exhaust As required	for dust	Şpecial	
	Mechanical (General	tor dust	Special N/A	
	Mechanical (General) As required	for dust	Other N/A	
Protective Gloves			Eye Protection	conditions
	Clothing or Equipmen		Goggles for dusty	CONCITIONS
Work/Hygienic Pr				
I/A				